

**Notice of Allowability**

Application No.

09/931,254

Applicant(s)

NISHIKADO ET AL.

Examiner

Yogesh C. Garg

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/23/2006.
2. ☒ The allowed claim(s) is/are 20-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

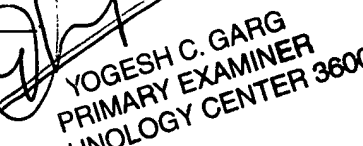
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 8/17/2001
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other

  
YOGESH C. GARG  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment received on 10/23/2006 is acknowledged and entered. Currently claims 20, 22 and 29 are amended. Claims 20-30 are pending for examination.

### ***Response to Arguments***

2. Applicant's arguments, see Remarks, pages 11-20, filed 10/23/2006, with respect to rejection of claims 10-20 have been fully considered and are persuasive. The rejection of claims 10-20 has been withdrawn in view of the current amendments and the applicant's arguments.

### ***Allowable Subject Matter***

3. Claims 20-30 are allowed. Claims 20, 22 and 29 are independent claims and claims 21, 23-28 and 30 are dependencies of claims 20, 22 and 29 respectively.

The following is an examiner's statement of reasons for allowance:

Regarding independent claim 20, the prior art of record, either alone or combined, does not fairly suggest or teach or render obvious all of the features, as a whole, of a data processing method in a service system comprising, inter alia, the steps of first providing the data processing relay apparatus with a data processing unit for

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processing data in accordance with a data processing instruction that indicates how to process the data. In a second step of the method, a data request, input by a user, is received from the client apparatus to the server apparatus by the data processing relay apparatus. The method includes a third step of sending the received data request to the server apparatus by the data processing relay apparatus. In addition, the method includes a fourth step of receiving, by the data processing relay apparatus, an extended data, which the server apparatus sends to the data processing relay apparatus in response to the data request, including the data requested in the data request and the data processing control information including a user's attribute that indicates how to process the received data. Furthermore, the method includes a fifth step of storing the received extended data by the data processing relay apparatus and a sixth step of extracting the data processing instruction from the data processing control information included in the extended data by the data processing unit of the data processing relay apparatus. Also in the method is a seventh step of processing the received data in accordance with the extracted data processing instruction by the data processing unit. The method further includes an eighth step of repeating the sixth step and the seventh step, until completion of processing in accordance with all the data processing instructions in the data processing control information by the data processing unit. A ninth step of the method includes sending, by the data processing relay apparatus, the data processed by the data processing unit to the client apparatus.

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The limitations of the other independent claims 22 and 29 are closely parallel and similar, and therefore, the statement of reasons for allowance for claims 22 and 29 would be based on the same rationale, as cited above for claim 20.

The statement of reasons for allowance for dependent claims 21, 23-28 and 30 would be based on the same rationale, as cited above, for claim 20.

4. Discussion of most relevant prior art:

(i) US Patent 6,442,651 to Crow, et al. (Crow) teaches a method and system of shared cache parsing, reducing latency in reviewing and presenting web documents to a user. A cache, which is coupled to one or more web clients, requests web documents from web servers on behalf of those web clients and communicates those web documents to the web clients for display. The cache parses the web documents as they are received from the web server, identifies references to any embedded objects, and determines if those embedded objects are already maintained in the cache. If those embedded objects are not in the cache, the cache automatically pre-fetches those embedded objects from the web server without need for a command from the web client. The cache maintains a two-level memory including primary memory and secondary mass storage. At the time the web document is received, the cache determines if any embedded objects are maintained in the cache but are not in primary memory. If those embedded objects are not in primary memory, the cache automatically pre-loads those embedded objects from secondary mass storage to primary memory

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without need for a request from the web client. Web documents maintained in the cache are periodically refreshed, so as to assure those web documents are not stale. The invention is applied both to original requests to communicate web documents and their embedded objects from the web server to the web client, and to refresh requests to communicate web documents and their embedded objects from the web server to the cache. Crow, whether taken individually or combined together with other prior art of record, does not teach all the above cited and underlined features, as a whole.

The applicant's arguments, see remarks, pages 14-16, are persuasive and compelling that Crow, alone or combined with any other prior art, does not teach the fourth, seventh and eighth steps of the claim 20, also recited in claims 22 and 29.

(ii) Qiong Luo et al.; "Active Query Caching for Database Web Servers"; 18 May, 2000 the article received with the applicant's IDS filed on November 8, 2004, hereinafter referred to Qiong, teaches a method and apparatus for performing active query caching for database web servers. Qiong teaches that an enhanced proxy server is modified to form an active proxy so as to enable active query caching. As per Qiong, the server sends the proxy a query applet which can process simple queries at the proxy. This teaching of Qiong enables the proxy server to share the database for overflow workload as well as to reduce the network traffic. Qiong teaches that content is sent out in response to a request. The content attached with the data in Qiong is sent with an applet by the server such that the server can migrate some tasks to the proxy. The applet is a kind of program for processing the data. The

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proxy has the program execution means and executes the received applet. These teachings of Qiong are entirely different from the features of the present invention as recited in the claims. Qiong, whether taken individually or combined together with other prior art of record, does not teach all the above cited and underlined features, as a whole. Also, see the applicant's remarks, pages 11-15, filed on 11/18/2005 which are persuasive and compelling in stating that Qiong, whether taken individually or combined together with other prior art of record, does not teach all the above cited and underlined features of the applicant's invention, as a whole.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6574627 B1 to Bergadano et al. (see at least col.8, lines 49-67), US Patent 6,035,281 to Crosskey et al. (see at least col.5, lines 11-25), and US Patent 6,378,053 B1 to Lamaire et al. (see at least col.3, line 54-col.5, line 35 and Figs 1 and 2B) disclose that a client can access objects from a proxy server if the requested

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objects are cached in the proxy server and if they are not cached in the proxy server then the proxy server can forward the request to the web/provider server and sends the results back to the client after receiving/retrieving the objects from the web/provider server.

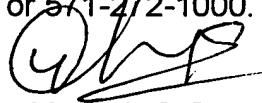
US Patent 6237031 B1 to Knauerhase et al. teaches that a client can access Internet objects from a proxy server, which is also called a transcoding server, and the proxy/transcoding server is capable of transcoding (for example, adding, changing or deleting ) content received from the Internet prior to returning the content to the client (see at least col.3, line 52-col.4, line 3).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh C. Garg whose telephone number is 571-272-6756. The examiner can normally be reached on Increased Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Primary Examiner  
Art Unit 3625

YCG  
12/19/2006